

ENVIRONMENT

AND

NATURAL RESOURCES



ENR TEAM

Tim Miller, Team Leader

Edilberto Alarcon, Mission Environmental Officer
and Activity Manager

Jorge Ellegren, Biodiversity Specialist and Activity
Manager

Carlos Gasco, Activity Manager

Marilu Bacigalupo, Activity Manager and Program
Assistant

Martha Garcia, Secretary

ENR TEAM

Shirley Hoffmann, Program Office

Rosario Saldana, RCO

Tommie Fairlie, SO13

Jaime Chang, SO11

Raul Tapia, CONT

Leslie Reed, RLA



BIODIVERSITY

- **Birds--1,710 species of which 112 are endemic and 86 are threatened**
- **Mammals--460 species of which 49 are endemic and 46 are threatened**
- **Flowering Plants--17,144 species of which over 5,000 are endemic**

BIODIVERSITY

- **World Life Zones (Holdridge classification)--84 out of a total of 119.**
- **Natural Forest--67.0 million hectares. Peru is losing forest at the rate of approximately 280,000 hectares per year.**
- **Natural Protected Areas--17.3 million hectares or 13.5% of Peru's total area with some degree of protection.**
- **Marine Fish Catch 1995/97--8,676,000 tons, largest in the Western Hemisphere.**

AIR POLLUTION IN LIMA

Annual average for some pollutants in the air of downtown Lima (corner of Abancay and Ancash) in CY2000 measured as micrograms per cubic meter.

- **Nitrogen dioxide: 264. Annual average is not to exceed 100 (ECA)**
- **Sulfur dioxide: 141. Annual average is not to exceed 80 (ECA)**
- **Total particulate: 225. EPA Standard is 75**

ENVIRONMENTAL MANAGEMENT

- **Line Ministries, e.g. industries, fisheries, mines, have environmental management offices.**
- **Coordinated by Environmental Management Council (CONAM)**
- **Structural Framework for Environmental Management (MEGA)**

SO4 - IMPROVED ENVIRONMENTAL MANAGEMENT IN TARGETED SECTORS

- **Period FY1996 - 2003**
- **Total Approved Amount
\$ 29.0 Million**

SO4 - ACTIVITIES

- **Sustainable Environment and Natural Resources Management (SENREM)**
FY-1996-2004 \$16.5 Million
- **Biological Diversity and Fragile Ecosystems Conservation and Management (BIOFOR)**
FY-1998-2002 \$ 7.0 Million
- **Urban Environmental Health Services and Hygiene Behavior (EH)**
FY-2000-2005 \$5.2 Million

RESULTS - SENREM

A. Legal Regulatory and Policy Framework

- **Structural framework for environmental management in Peru/MEGA**
- **Framework environmental legislation for manufacturing and fisheries sectors**
- **National Environmental Assessment System**
- **Air quality standards and maximum permissible limits**
- **Decentralization of environmental management. Creation of 18 CARs.**

RESULTS - SENREM

B. Private Sector Advocacy

- **Nine Policy Research Studies**
- **Creation of Sociedad Nacional del Ambiente**
- **Annual State of the Environment Report**
- **Pilot community-based environmental monitoring program**
- **ISO 14000 Standard leading to certification of 15 firms**

RESULTS - SENREM

C. Pilot Demonstration Projects

- **Total of 24 projects completed**

D. Clean and Efficient Production

- **Clean Production Center (CET-Peru) established and operating**
- **\$2 Million DCA guarantee fund established**

RESULTS - BIOFOR

- **NGO and CBO staff trained at sites surrounding six natural protected areas**
- **12 pilot projects completed**
- **Forest law and regulation approved**
- **Certification standards approved for wood and Brazil nuts**
- **Forest concessions being awarded under new forest law**
- **Protected Area law and regulation approved**

RESULTS - BIOFOR

- **Provided the basis for a mutually beneficial program with SO5—Joint Environmental Agenda**
- **Implemented first national scholarship program on economic valuation of natural resources**
- **Implementing comprehensive training program for park guards**

RESULTS - ENV. HEALTH

- **Lead in blood program in Lima and Callao**
- **Sites selected and awards being made for community-based pilot projects**

NEW STRATEGY 2002 - 2006

SO12

**STRENGTHENED ENVIRONMENTAL
MANAGEMENT TO ADDRESS
PRIORITY PROBLEMS**

INTERMEDIATE RESULTS

- 1. National Environmental Policy and Institutional Framework Strengthened**
- 2. Local Environmental Management Capacity Strengthened**
- 3. Increased Environmental Awareness and Demand**

STRENGTHENED ENVIRONMENTAL MANAGEMENT (STEM) ACTIVITY



ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)

- **Enterprise-based**
- **Locality-based**



STEM

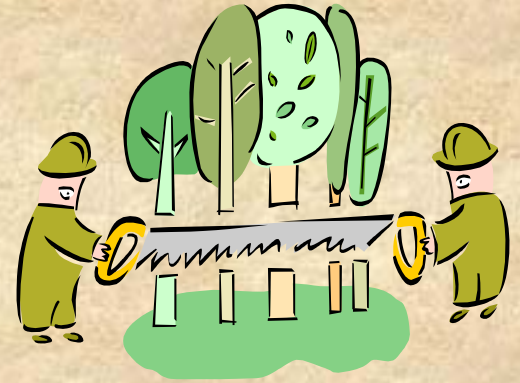
SUSTAINABLE ENVIRONMENTAL MANAGEMENT

“ Expand the national environmental policy and institutional framework to fully encompass and facilitate EMS applications at both enterprise and locality levels, leading to voluntary internalization of environmental values and associated expenditures”

PRIORITY ENVIRONMENTAL PROBLEM AREAS

Renewable Natural Resources

- threatened bio-diverse ecosystems
- destruction of forest resources



Human Environments

- growing industrial pollution
- unhealthy poor urban environments



CONSTRAINTS

- **Gaps and weaknesses in the national institutional and policy framework**
- **Limited local applications of Environmental Management Systems**
- **Insufficient demand for environmental management actions**



STEM INTERVENTIONS

Human Environment

PROBLEM/ CONSTRAINT	NATIONAL POLICY AND INSTITUTIONAL FRAMEWORK	LOCAL ENVIRONMENTAL MANAGEMENT	ENVIRONMENTAL AWARENESSES UNDERSTANDING AND DEMAND
INDUSTRIAL POLLUTION	<ul style="list-style-type: none">• Clean Production Center• GOP inst. Strengthening• Standards/Regulations/ Incentives	<ul style="list-style-type: none">• EMS adoption• Regional Capabilities• Consultants/Demo-projects	<ul style="list-style-type: none">• CP/P2 information• Promotion of CP advantages• Demand for clean products
URBAN POLLUTION	<ul style="list-style-type: none">• Improved EH Policies• Effective EH EMS services	<ul style="list-style-type: none">• Community based EH• Risks monitoring and Assessment	<ul style="list-style-type: none">• Information for EEC materials

STEM INTERVENTIONS

Renewable Natural Resources

PROBLEM/ CONSTRAINT	NATIONAL POLICY AND INSTITUTIONAL FRAMEWORK	LOCAL ENVIRONMENTAL MANAGEMENT	ENVIRONMENTAL AWARENESSES UNDERSTANDING AND DEMAND
BIO-DIVERSE ECO-SYSTEMS FOREST RESOURCES	<ul style="list-style-type: none"> Selected policy gaps closed Locality-based EMS approaches ready for Implementation 	<ul style="list-style-type: none"> Pilot EMS applications concluded Supporting services to EMS clients 	<ul style="list-style-type: none"> Information for EEC materials

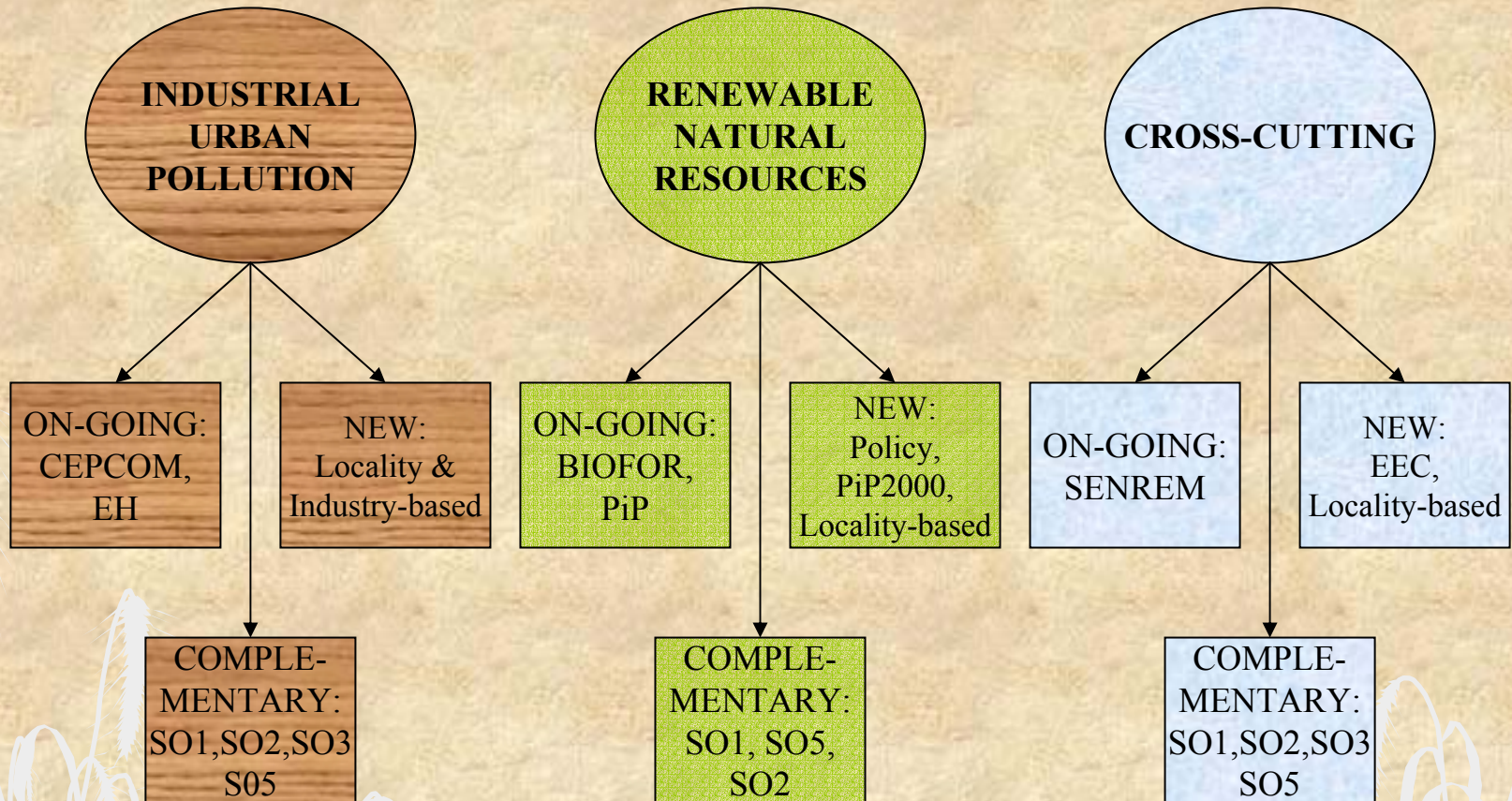


STEM INTERVENTIONS

Crosscutting

PROBLEM/ CONSTRAINT	NATIONAL POLICY AND INSTITUTIONAL FRAMEWORK	LOCAL ENVIRONMENTAL MANAGEMENT	ENVIRONMENTAL AWARENESSES UNDERSTANDING AND DEMAND
LOCALITY-BASED APPLICATIONS	<ul style="list-style-type: none">• EMS approach operational• EMS feedback operational	<ul style="list-style-type: none">• EMS approach tested and validated• EMS approach applied to Selected Areas	<ul style="list-style-type: none">• Information for EEC materials
ENVIRONMENTAL EDUCATION AND COMMUNICATION	<ul style="list-style-type: none">• More effective demand	<ul style="list-style-type: none">• More effective Demand• EMS entities access EEC services	<ul style="list-style-type: none">• EEC clearing house• Environmental awareness program for key decision makers and public

STEM STRUCTURE



CRITERIA FOR SITE SELECTION

- **SO5 Alternative Development**
- **SO2 Economic Corridors**
- **EH Community-based Demonstration Projects**
- **BIOFOR Natural Protected Areas and Buffer Zones**
- **CEPCOM Pollution Prevention Areas**



BUDGET



- **Americas Fund--\$24.0 million**
- **Tropical Forest Conservation Fund--\$10.6 million**

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